

	PATENT	
(19)	AUSTRALIAN PATENT	OFFICE

(11) Application No. AU 199747626 B2 (10) Patent No. 721968

- Title (54)Operation of a video gaming machine
- International Patent Classification(s) G07F 017/34 A63F 009/22 $(51)^{7}$
- Application Date: 1997.12.09 (22)Application No: 199747628 (21)
- **Priority Data** (30)

(44)

- (33) Country (32) Date (31)Number 1996.12.10 AU PO4113 ΑÚ PO4113 1996.12.10
- Publication Date: 1998.06.11 (43)Publication Journal Date: 1998.06.11 (43)2000.07.20 Accepted Journal Date:
- (71)Applicant(s) I.G.T. (Australia) Pty. Limited
- (72)Inventor(s) Lynne Oldfleid
- Agent/Attorney SPRUSON and FERGUSON,GPO Box 3898,SYDNEY NSW 2001 (74)
- Related Art (56)WO 96/24421 US 5116055 AU 13023/92

.:::

Operation of a Video Gaming Machine

ABSTRACT

A video gaming machine (30) is disclosed, having a jacket prize operation. A player of the machine can wager n units across m win lines, and by replicating winning indicia on ones of the simulated spinning reels (i-v), whereby the chances of winning a jacket prize become proportional to the n units wagered. The number of indicia replicated across the reels is such that the multiplication product thereof is equal to n. In one example, where n = 4, there is replication of one indicia on each of two reels such that (1 replication + 1 original) x (1 replication + 1 original) = 4.

[N:\LiBK]00891:BFD

S & F Ref: 401198

AUSTRALIA

PATENTS ACT 1990

COMPLETE SPECIFICATION

FOR A STANDARD PATENT

ORIGINAL

Name and Address I.G.T. (Australia) Pty. Limited of Applicant: 1 Rosebery Avenue Rosebery New South Wales 2018 AUSTRALÍA Lynne Oldfleld Actual Inventor(s): Spruson & Ferguson, Patent Attorneys Level 33 St Martins Tower, 31 Market Street Sydney, New South Wales, 2000, Australia Address for Service: Operation of A Video Gaming Machine Invention Title: ASSOCIATED PROVISIONAL APPLICATION DETAILS [32] Application Date [31] Application No(s) [33] Country 10 December 1996 P04113 ΑU

The following statement is a full description of this invention, including the best method of performing it known to me/us:-

16

20

- 1 -

OPERATION OF A VIDEO GAMING MACHINE

Field of the Invention

This invention relates to the operation of a video gaming machine, and particularly to control over such a machine having jackpot play.

Background of the Invention

Video gaming machines also are commonly known as a slot, poker or fruit machines, and provide a player with a game of chance by way of individual plays of a simulated spinning reel game. A typical known configuration is for the video screen display of the gaming machine to simulate between 3 to 5 spinning reels, with each reel having between 20 to 100 "stops" on each reel. Each stop bears an indicia, with a play of the game involving the reels being spun in a simulated manner, and the outcome of the play depending upon the resultant combination of indicia appearing on one or more "win lines" when the reels cease spinning. A win line typically includes adjacent combinations of reel stops along imaginary horizontal or diagonal lines passing through the simulated reels. Spinning of the simulated reels and the stopping combination is determined by the gaming machine controlling software.

Known video gaming machines are programmed such that the number of stops on a simulated reel are fixed. Were it otherwise, the odds/chances of winning combinations along win lines occurring would vary between plays of the gaming machine, giving an unfair advantage to the "house".

In "normal" game operation, a player can choose to wager on 1 or more win lines per play of the game, and further can wager multiples of the relevant credit unit denomination of the machine (e.g. 20c, 50c, \$1, etc) on the chosen number of win lines. Thus the smallest wager per play is 1 credit unit for 1 win line = 1 credit unit, whilst the larger wager can be, say, 10 credit units x 5 win lines = 50 credit units.

INCLIBETOOSO LIBED

20

28

·:::::

•:::::

The prize achieved for winning combinations is scaled in direct proportion to the number of credit units wagered per win line.

It is becoming common at sites where a number of video gaming machines are available for a second "jackpot" game to be playable. The jackpot game may apply to only a single gaming machine (stand alone) or to a number of gaming machines (link progressive). The jackpot prize accumulates with regular plays of the one or more gaming machines, and is won only when a particular specified combination of indicia occurs for a play on any of the one or more machines. The jackpot can be won on one or more win lines depending upon the gaming machine's configuration, however is independent of the number of credit units wagered on that win line. This is because the jackpot is not scaled in accordance with the number of credit units wagered as is the case for the normal game. Thus 1 credit unit wagered on a win line has the same chance of winning as a wager of 5 credit units of that win line. This is perceived as being unfair to players who play machines especially for the jackpot and are prepared to wager multiple numbers of credit units, rather than the player who will wager only single credit units.

The present invention is concerned with overcoming this disadvantage in the prior art.

Summary of the Invention

The gist of the invention is to scale the chances of winning a jackpot in direct proportion to the number, n, of credit units wagers by replicating winning indicia at other reel stops on one or more simulated reels so that the number of such indicia per reel multiplied across the reels is equal to n. In this way the number of 'stops' per reel is unchanging.

The invention therefore discloses a method for operation of a video gaming machine having a jackpot prize, the gaming machine having a plurality of simulated spinning reels, each reel having a number of indicia, and a win of the prize occurring

16

20

25

.....

for one or more combinations of said indicia appearing on one or more reels in a play of the machine, each play of the machine being wagered in n multiples of credit units, the method including the steps of:

replicating at least one of the indicia for a jackpot winning combination on at least one reel so that the multiplication product of the number of replicated and original indicia across the reels equals n.

The invention yet further discloses a method for operation of a video gaming machine having a jackpot prize, the method including the steps of:

detecting the number, n, of credit units wagered on a play of the gaming machine;

replicating an indicium from amongst a combination of indicia appearing across a plurality of simulated spinning reels constituting a jackpot winning combination on one or more of said reels so that the multiplication product of the number of replicated and original indicia across the reels equals n;

causing simulated spinning then stopping of said reels; and determining whether a combination of indicia occurs across the reels to give a jackpot winning result.

Yet further, n credit units can be wagered on each one of m win lines whereby n credit units can be wagered on each one of m win lines, each win line representing a predefined sequence of said indicia over one or more of these reels.

The invention yet further discloses a video gaming machine having a jackpot prize, the machine including:

a video display;

player input means by which credit unit wagers can be made of any play of the machine; and

processor means for operation of the gaming machine, and operable to generate a plurality of simulated spinning reels on said video display, each reel having a number of indicia, a win of the jackpot prize occurring for one or more combinations of

10

15

20

•::::

-4-

said indicia appearing on one or more reels in a play of the machine, further operable to replicate at least one of the indicia for a jackpot winning combination on one or more reel so that the multiplication product of the number of replicated and original indicia across the reels equals n, to caused simulated spinning them stopping of said reels for each play of the game, and to determine whether a combination of indicia occurs across the reels to give a jackpot winning combination.

Brief Description of the Drawings

Embodiments of the invention now will be described with reference to the accompanying drawings, in which:

Figs. 1 and 2 show a simulated spinning reel display in the prior art;

Fig. 3a shows a schematic block diagram of a video gaming machine;

Fig. 3b shows a schematic block diagram of game operation; and

Figs. 4 to 7 shows a simulated spinning reel display illustrating a number of embodiments.

Description of Preferred Embodiments

Fig. 1 shows a known mechanical spinning reel arrangement for gaming machines. This arrangement is described for the purposes of illustrating equivalent elements and functions common with simulated spinning reels presented on video display apparatus used in embodiments of the present invention. As shown in Fig. 1, three reels 10,12,14 are mounted from a common shaft 16. Each reel has a fixed number of "stops" with each stop represented by a discrete indicium. Traditionally the indicium associated with each reel stop have included types of fruit, numbers, playing cards and the like. When installed in a gaming machine, the mechanical spinning reels 10-14 are partly obscured such that, typically, three stops only (represented by the dashed box) can be seen by the player.

15

20

29

Fig. 2 shows a screen display 20 of a video gaming machine that simulates the known mechanical spinning reel arrangements. The display 20 shown in Fig, 2 simulates a three reel machine, with three stops on each reel shown at any one time. Each reel 22-26 bears indicia equivalent in number to the number of stops on the reel. For any gaming machine, the number of stops on each reel will not necessarily be the same, but usually remain constant in play of the game.

As is commonly known, in play of a gaming machine a number, of credit units are wagered upon the outcome of spinning of the reels, namely the resulting combination appearing along one of a number of win lines. The number of win lines playable usually is selectable by the player by way of pushbuttons. Fig. 2 shows five win lines, win lines nos. 1 to 3 representing the horizontally adjacent arrangement of indicia, and win lines 4 and 5 being the diagonally adjacent indicia.

Fig. 3a is a schematic block diagram showing the basic component parts of a known video gaming machine 30, in which the video display 20 is connected with a processor control unit 32 by a video interface link 34. The control unit 32 contains resident software that has control over all of the operations of the gaming machine 30, including play of the game and simulation of the spinning reels 22-26 on the display 20. The control unit 32 also is coupled with an input/output module 36 by an internal bus 38. The input/output module 36, in turn, connects by the bus 38 to lamps and switches 40 associated with the gaming machine, and to player pushbuttons or controls 42 by which a player can wager desired credit units, select the number of win lines per play of the game and activate play of the game. A known gaming machine upon which software embodying the invention can be run includes the present applicant's Game King "type gaming machine. Software embodying the invention resides in the EPROM memory within the processor control unit 32 and is written in the "C" or "assembler" programming languages.

Fig. 3b shows game play operation from the time when a player has selected the bet amount and the win lines to be played. Firstly, the number of lines, number of

[N:\LIBK]00691:8F0

credits and any other desired information is stored in a memory of the control unit 32 (step 50). Next, in step 52, the random numbers for the new outcome are assessed. In step 54, the reels 22-26 are cocked-back based on the preceding bet in the context of the credits and win lines. Thereafter step 56 causes the reels to be spun based on the current bet as a function of both credits wagered and the number of win lines. The reels are then stopped (step 58), and the result evaluated in the sense of whether there is a win or not (step 60).

These steps are expressed in pseudo-code as follows.

This structure of the underlying reels - to allow multiple symbol combinations - is effected by the following code. Any reference to "reel change" or the like is to be understood as activating the one or more background symbols. The number of reel stops otherwise does not change.

```
begin extract #1
15
     /* This struct has the ghost */
     /* which was in the now redundant Reel_strip struct, and reel_change which */
     /* tells the code how many reels have changed and the type of change.
20
     typedef struct Slot. Reel Strip
                                             /* e.g. credits bet.... variation.... */
         Reel_Change reel_change;
                                            /* number of physical_reels changed
         unsigned int reel changes;
                                            /* virtual stops
         unsigned short virtual stops;
26
         const unsigned char *virtual_strip; /* start of the virtual strip
         const Physical Reel *physical_strip; /* first physical strip
                                         /* for flashing of symbols and US 3reels*/
         Picture**
                       ghost;
     }Slot Reel Strip;
     end extract #1
30
     begin extract #2
     /* These enumerations are to be used for any reels that dynamically change */
     /* during a game. CREDITS_BET for example is used in Megabucks where each */
     /* credits bet change must have a reel to point to 10 credits 10 reels.
      typedef enum Reel Change
         NO CHANGE
                                  = 0x00.
                                  = 0x01, /*One reel for each possible credit Bet*/
         CREDITS BET
         CREDITS_BET_PER_LINE = 0x02, /*One reel for each credit per line
```

```
-7 -
```

```
NUMBER_OF_LINES_PLAYED = 0x03, /*One reel for each line
                                          = 0x04, /*Two reels 1 for free play, 1 for standard play
                    FREE_PLAY
                                                  = 0x05, /*One reel for every possible free game
                    FREE_GAME_NUMBER
                                                  0x10.
                    LAST_CHANGE
                 }Reel_Change;
                 end extract #2
                 This structure allows for different reel strips of different sizes for each reel,
           10
                 implemented as:
                 begin extract #4
                 static const Physical Reel preel1[] =
            15
                                                                              &physical_reel_1_1}.
                    { sizeof(physical_reel_1_1) / sizeof(Symbol_Element*),
                    { sizeof(physical_reel_1_2) / sizeof(Symbol_Element*),
                                                                              &physical_reel_1_2},
                  end extract #4
            20
                  This gives two different reel strips using this implementation of the structure from
                  extract #1:
                  begin extract #5
                  const Slot_Reel_Strip strip_1 =
            25
                     FREE PLAY,
                     sizeof(preell) / sizeof(Physical_Reel),
·***
                     sizeof(virtual_reel_1),
                     &virtual_rcel_1[0],
            30
                     &preel1[0],
                     &picture_slot_5r_ace.
                  };
                  end extract #5
.:::
             35
                  For clarification, the physical_reel_1_1 and 2 mentioned in extract #4 contains a list of
                  all the symbols on that reel strip; it is created thus:
                  begin extract #6
                  static Symbol_Element const *const physical_reel_1_1[] =
             40
                                                            , /* stop 0 */
                     &ps501188_ace
                                                            , /* stop 1 */
                     &ps501188 nine
                                                               , /* stop 2 */
                      &ps501188_symbol_c
             48
```

```
ment const *const physical_reel_1_2[]
      static Symbol
                                                , /* stop 0 */
         &ps501188 ace
                                               , /* stop 1 */
         &ps501188 ten
                                                  , /* stop 2 */
         &ps501188 symbol c
      end extract #6
      The changing reels are coded at runtime as follows:
10
      begin extract #7
      /*
15
      // FUNCTION: slot_offset reels
      // DESCRIPTION: Change any physical reel offsets if needed. This routine is called
                  just before the reel_spin state so that no symbols change before the
                  punters eyes. This procedure can also be called in history, paytable
      11
20
                  tests etc.
      //
      // PARAMETERS:
                           The slot game.
                  slot
                  reel data This is usually slot-> reel_data. However in pay test,
      //
                           strip test and history, a different reel_data is used.
      11
                           This structure contains the data that will alow the
      //
                           calculation of game_relevant data such as multipliers.
                            This is usually slot->reel_data. However in pay test,
      11
                  reels
                           strip test and history, a different set of reels is
 20
      //
                           used. The offsets are stored in this structure
      //
                           reels->physical reel offsets[x]
      //
                        void
      // RETURNS:
. 35
      void slot_offset_reels (const Slot *slot,
                        Slot_Reels reel_data,
                        Reels * reels)
 40
          unsigned char i, bet_per_line = 1, num_lines = 0;
         unsigned int total_bct = 0;
          for(i=0; i < slot-> payline_count; i++)
             total_bet += reel_data.multipliers[i];
            if(reel_data.multipliers[i] |= 0)
```

- 9 -

```
num lines++;
       /* if no lines were selected then it is the first game */
       /* based on current history
5 ,
       if (Inum lines)
          num_lines = bet_per_line = total_bet = 1;
       bet_per_line = total_bet / num_lines;
10
       for(i=0; i < slot-> reel_count; i++)
          switch ((*slot-> reel_strips)[i]-> reel_change)
             case NO_CHANGE:
15
                reels->physical_reel_offsets[i] = 0;
                break;
             case CREDITS_BET:
                if ((*slot->reel_strips)[i]->reel_changes != slot->max_bet)
                   system_error(SE_PHYSICAL_REEL_MISMATCH);
20
                reels->physical_reel_offsets[i] = total_bet - 1;
                break;
             case CREDITS_BET_PER_LINE:
                if ((*slot-> reel_strips)[i]-> reel_changes != MAX_BET_PER_LINE)
25
                   system_error(SE_PHYSICAL_REEL_MISMATCH);
                reels->physical_reel_offsets[i] = bet_per_line - 1;
                 break;
              case NUMBER_OF_LINES_PLAYED:
 30
                if ((*slot->reel_strips)[i]->reel_changes != slot->payline_count)
                   system_error(SE_PHYSICAL_REEL_MISMATCH);
                reels->physical_reel_offsets[i] = num_lines - 1;
                 break;
 38
              case FREE PLAY:
                 if ((*slot->reel_strips)[1]->reel_changes != 2)
                    system_error(SE_PHYSICAL_REEL_MISMATCH);
                 if(slot-> free_play_mode)
 40
                    reels->physical_reel_offsets[i] = 1;
                 else
                    reels->physical_reel_offsets[i] = 0;
              break;
              case FREE_GAME_NUMBER:
 45
                 /* fgames.c should have looked after this baby */
                 system_error(SE_PHYSICAL_REEL_MISMATCH);
               break;
```

20

25

30

default

AHEARN FOX

	system_error(SE_PHYSICAL_REEL_CHANC	SE_INVALID);
	break;	
}		
}		•
} /*		*/
end ext	ract #7	

10 This code is executed just before step 36 of Fig. 3b.

Fig. 4 shows an embodiment of the display 20 at completion of a play of the gaming machine. The gaming machine firstly provides a regular game, for which credit units are awarded for winning combinations of indicia. The direction of simulated spinning of the reels is from top to bottom of the display 20. For example, had the player selected three win lines, a credit unit prize would have been awarded for the three "9s" appearing on win line no. 3. The gaming machine further provides for a jackpot win on the sequence "A(ce), K(ing), Q(ueen), J(ack), 10". For that combination alone, a jackpot prize is won independent of any other win of the regular game provided by the gaming machine. In the example of Fig. 4, the player has wagered two credit units on a single win line (i.e. win line no. 1). Because two credit units have been wagered, it is necessary to increase the player's chance of winning by exactly two. This cannot be achieved by adding a further reel stop, rather it is achieved by implementing a background indicia at a following reel stop to the stop having the indicia "10". In this case, right-most reel (v) has been chosen for this function. Por the purpose of illustration, the immediately adjacent reel stop, being the next to appear on the display 20 with incremental rotation of the right-most reel, is shown in phantom, to indicate that a background indicia "10" is not included.

It is not essential for the background indicium to be placed on the immediately following reel stop, rather it could be placed on any other one of the stops on that reel.

In the example of Fig. 4, because the background "10" appears on the immediately following stop, the jackpot is won on win line no. 1 for reason of the

15

20

26

•::::

winning combination being present. If the player had wagered three credit units, then a further background "10" would appear on the next following reel stop (the "8"), shown in phantom. In general, where there are n credit units wagered, the relevant jackpot winning indicia appears n times on one reel. As noted, the background indicia are not necessarily contiguous across adjacent reel stops.

It is not essential that the replicated indicia all are located on the same reel, as will become apparent.

Fig. 5 shows an example where a player wagers one credit on three win lines. The jackpot winning sequence of indicia is the same as for Fig. 4. Since only one credit unit has been wagered, no background indicia are provided on right most reel (v), and in the example shown, a jackpot win has occurred on win line no. 3.

Fig. 6 shows a yet further example, in which a player has wagered three credit units on each of five win lines. In this case, centre reel (iii) is the one conveniently chosen for the background indicia to be replicated thereon. The winning sequence is the same as for the examples of Figs. 4 and 5, meaning that the indicium "Q" is to be replicated. Since n = 3, two background indicia must be produced, and are shown adjacent the location of the "Q" indicium appearing on win line no. 1. In determining which reel is to carry the background indicia, it is necessary that all of the win lines pass through that reel. In the case shown, all of win lines nos. 1 to 5 pass through the central reel (iii). Indeed, all of the win lines pass through each one of the reels, however there can be other instances where this will not occur. In the example shown, the jackpot has been won on win line no. 4.

In another embodiment shown in Fig. 7, the background indicia can be split between reels (as noted above). Here 4 credits have been wagered on three win lines. The background indicia have been placed on two separate reels (i.e. reels (ii) and (iv)), resulting in a winning combination on win line no. 2. The number of winning indicia distributed across more than 1 reel is subject to the requirement that the multiplication

16

. 20

product across the reels equals n. In this case, there are 2 J(acks) on reel (iv) and 2 A(ces) on reel (ii), hence $2 \times 2 = 4$.

By way of a further example, if 8 credit units were wagered they could be distributed as two indicia on three reels, i.e. $2 \times 2 \times 2 = 8$.

The use of background indicia replicated across one of the reels has the benefit of not disrupting play of the normal game so far as the probability of various winning combinations occurring. These probabilities are the subject of strict requirements as to mathematical probabilities in terms of return of winnings, usually by governmental regulatory authorities. A further advantage comes in that those players who wish to wager higher number of credit units in an attempt to win a valuable jackpot are no longer at a disadvantage relative to players who wager small amounts.

By way of further exemplifying the inventive concept, a further embodiment will be described.

Consider the case of a two reel machine having 10 stops per reel. The indicia are arranged on the reels with a frequency as follows:

symbol	reel 1	reel 2
orange	1	1
apple	2	2
banana	3	. 3
cherry	4	4
total	10	10

In play of the normal game, assume the prizes are as follows for 1 credit unit wagered:

2 * oranges = 10
2 * apples = 5
2 * bananas = 3
2 * cherries = 2

15

20

25

•

- 13 -

Further, assume there is only a single win line, in which case the player return (PR) is: prize (P) * probability of prize on a single line (pr).

For this game with the prizes and symbol distribution described, the player return is as follows:

2 * oranges	= 10 * 1/100	= 10%
2 * apples	= 5 * 2 * 2/100	= 20%
2 * bananas	= 3 * 3 * 3/100	= 27%
2 * cherries	= 2 * 4 * 4/100	= 32%
total		= 89%

Consider now the situation of multiple credit unit wagers and multiple win lines, and for example, 2 credits on 3 lines or 3 credits on 2 lines. In this case the return to player for the 2 oranges prize is given by the formula

$$PR = (P + M) + (pr + N)$$
credits invested

where M is the number of credit units per line, and N is the number of win lines chosen.

In the case of a jackpot game the prize table changes such that 2* oranges now pays 5 + 5% regardless of the number of credit units wagered. Thus for multiple wagers and multiple win lines, the player return cannot be held constant. The player return becomes:

$$PR = \underbrace{P*(pr * N)}_{\text{total credits invested}} + 5\%$$

Since the total credits invested is M * N, this is not the same as the single game player return.

For the case of 2 credit units on 3 win lines, the player return is:

$$2 * oranges = 5 * (1/100 * 3)/6 + 5\% = 7.5\%$$

15

- 14 -

2 * apples =
$$(5 * 2) * (2 * 2/100 * 3)/6$$
 = 20%
2 * bananas = $(3 * 2) * (3 * 3/100 * 3)/6$ = 27%
2 * cherries = $(2 * 2) * (4 * 4/100 * 3)/6$ = 32%
total = 86.5%

For the case of 3 credit units on 2 win lines, the player return is:

2 * oranges =
$$5 * (1/100 * 2)/6 + 5\%$$
 = 6.6%
2 * apples = $(5 * 3) * (2 * 2/100 * 2)/6$ = 20%
2 * bananas = $(3 * 3) * (3 * 3/100 * 2)/6$ = 27%
2 * cherries = $(2 * 3) * (4 * 4/100 * 2)/6$ = 32%
total = 86.5%

The problem of differing return arises because it is not possible to multiply the current jackpot value by the credit units wagered. However, by implementing the n-1 background indicia as described above, the player return calculation becomes:

$$PR = P * (pr * M) * N$$
total credits invested

The total credits invested is M * N, so this reduces to the Player Return for the single line game. It also has the advantage of having the same player return regardless of the number of lines or credits won.

Again, for the case of 3 credit units on 2 win lines, the player return is:

And for the case of 2 credit units on 3 win lines, the player return is:

. - 15 -

2 * oranges	= 5 * 2/100 * 3/6 + 5%	= 10%
2 * apples	= 5 * 2 * 2 * 2/100 * 3/6	=20%
2 * bananas	= 3 * 2 * 3 * 3/100 * 3/6	= 27%
2 * cherries	= 2 + 2 + 4 + 4/100 + 3/6	= 32%
	•	= 89%

It will be appreciated that a further embodiment relates to a linked arrangement of a plurality of gaming machines such that all machines participate in seeking win of the jackpot prize from a common pad. The individual machines can be linked to a central controller by a network structure in any known manner.

(N:\LIBK)00681:8FD

15

20

25

The claims defining the invention are as follows:

1. A method for operation of a video gaming machine having a jackpot prize, the gaming machine having a plurality of simulated spinning reels, each reel having a number of indicia, and a win of the prize occurring for one or more combinations of said indicia appearing on one or more reels in a play of the machine, each play of the machine being wagered in n multiples of credit units, the method including the steps of:

replicating at least one of the indicia for a jackpot winning combination on at least one reel so that the multiplication product of the number of replicated and original indicia across the reels equals n.

2. A method for operation of a video gaming machine having a jackpot prize, the method including the steps of:

detecting the number, n. of credit units wagered on a play of the gaming machine;

replicating an indicium from amongst a combination of indicia appearing across a plurality of simulated spinning reels constituting a jackpot winning combination on one or more of said reels so that the multiplication product of the number of replicated and original indicia across the reels equals n;

causing simulated spinning then stopping of said reels; and determining whether a combination of indicia occurs across the reels to give a jackpot winning result.

3. A method as claimed in claim 1 or claim 2, whereby n credit units can be wagered on each one of m win lines, each win line representing a predefined sequence of said indicia over one or more of these reels.

10

16

- 4. A method as claimed in claim 3, whereby each win line includes only one indicium per reel.
- 5. A method as claimed in claim 4, whereby each said replicated indicium is placed in an immediately adjacent position to the like indicium on the respective reel or reels.
 - 6. A method as claimed in any one of claims 3 to 5, whereby said number m of win lines is user selectable.
 - 7. A video gaming machine having a jackpot prize, the machine including:

a video display;

player input means by which credit unit wagers can be made of any play of the machine; and

processor means for operation of the gaming machine, and operable to generate a plurality of simulated spinning reels on said video display, each reel having a number of indicia, a win of the jackpot prize occurring for one or more combinations of said indicia appearing on one or more reels in a play of the machine, further operable to replicate at least one of the indicia for a jackpot winning combination on one or more reel so that the multiplication product of the number of replicated and original indicia across the reels equals n, to caused simulated spinning them stopping of said reels for each play of the game, and to determine whether a combination of indicia occurs across the reels to give a jackpot winning combination.

8. A gaming machine as claimed in claim 7, wherein said processor means is further operable to allow n credit units to be wagered on each one of m win lines, shown on said display, by the player input means, each win line representing a predefined sequence of said indicia over one or more of the reels.

(N:\LiBKj00681:BPD

28

20

FEB.07 2002 17:00 01/32210001

5

16

20

25

1

- 9. A gaming machine as claimed in claim 8, wherein said processor means causes each win line to include only one indicium per reel.
- 10. A gaming machine as claimed in claim 9, wherein said processor means causes each said replicated indicium shown on the display to be placed in an immediately adjacent position to the like indicium on the respective reel or reels.
- 11. A gaming machine as claimed in any one of claims 8 to 10, wherein said input means and said processor means co-operate to allow said number m of win lines to be user selectable.
 - 12. A linked jackpot prize system including a plurality of gaming machines as claimed in any one of claims 7 to 11, a central controller and a network interconnecting the gaming machines at least to the central controller, the central controller maintaining a common jackpot pool to which at least said gaming machines contribute from player wagers the pool being redeemable on a winning jackpot combination processing on ones of the gaming machines.
 - 13. A method for operation of a video gaming machine substantially as herein described and as shown in Figs. 3a to 7 at the accompanying drawings.
 - 14. A gaming machine substantially as herein described and as shown in Figs. 3a to 7 of the accompanying drawings.

DATED this Ninth Day of December 1997

I.G.T. (Australia) Pty Limited

Patent Attorneys for the Applicant SPRUSON & FERGUSON

.

1/5

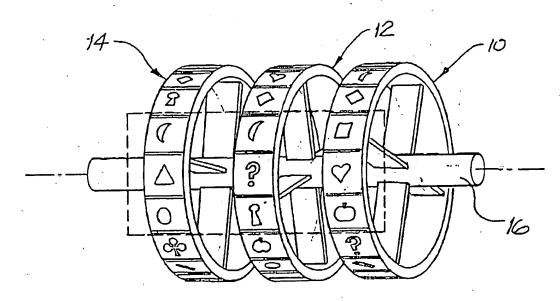
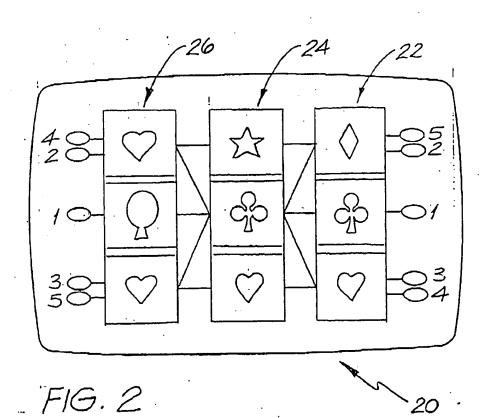


FIG. 1



2/5 47626/97

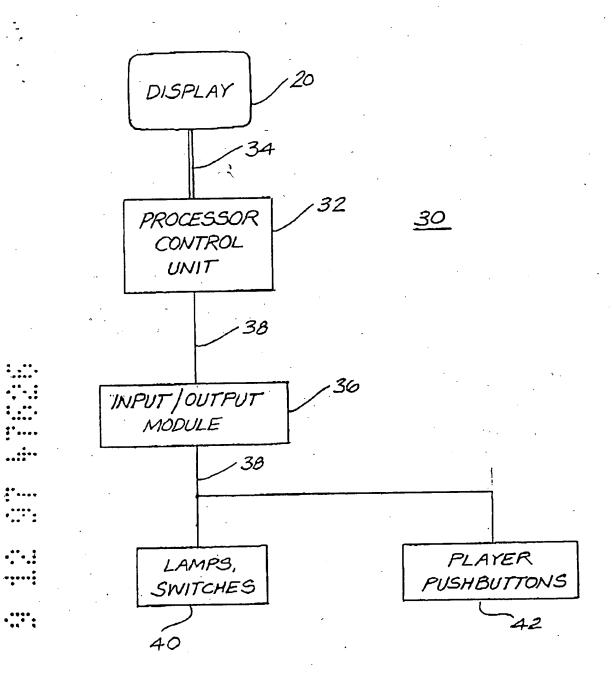
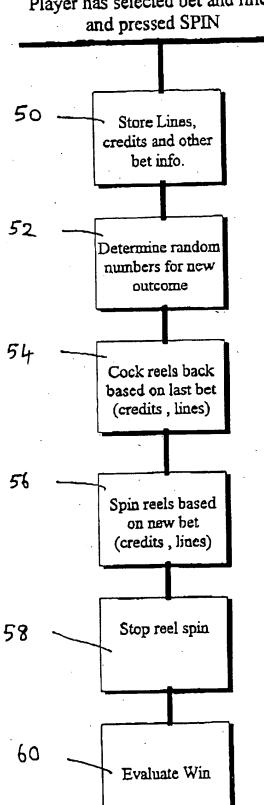


FIG. 3a

?

•

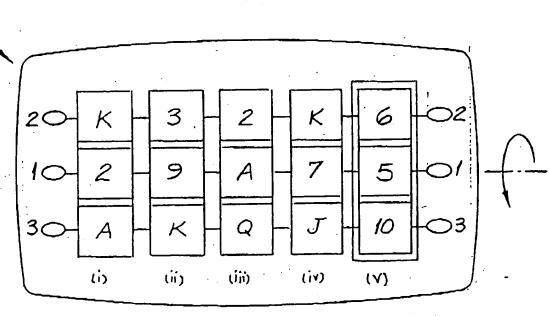
Player has selected bet and lines



F1G.36

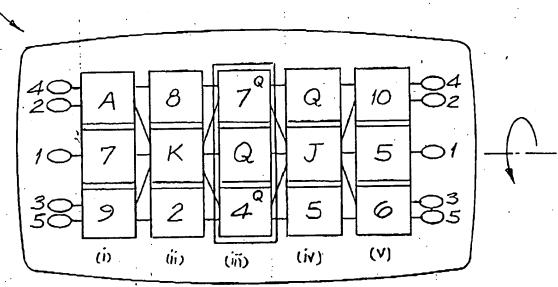
2 CREDITS ON ONE WIN LINE

F16.4



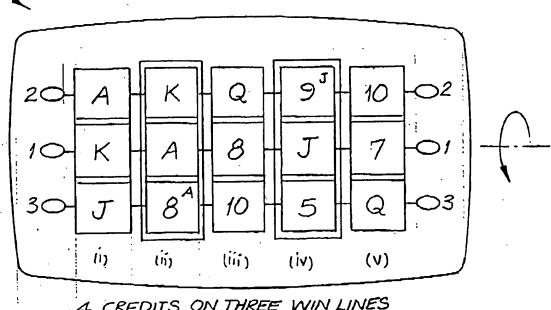
I CREDIT ON THREE WIN LINES

FIG. 5



3 CREDITS ON FIVE WIN LINES

F16.6



4 CREDITS ON THREE WIN LINES

FIG. 7